

What is claimed is:

5 *Sub B5*
1. A line head for ink-jet printer comprising: a plurality of ink nozzle; ink passages each communicating to each ink nozzle separately; ink chambers each communicating to each ink passage separately; and a piezoelectric element of ferroelectric substance for changing a capacity of each ink chamber separately to jet an ink from said ink nozzles through said ink passages; wherein a silicon substrate is employed as a substrate on which said ink nozzles and said ink passages
10 are formed.

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2. The line head for ink-jet printer, wherein the ink nozzles and the ink passages are processed finely using a silicon plasma etching method which is a design technique of integrated circuit.

Sub B6
15 3. A line head comprising: a plurality of ink nozzle; ink passages each communicating to each ink nozzle separately; ink chambers each communicating to each ink passage separately; and a piezoelectric element of ferroelectric substance for changing a capacity of each ink chamber separately to jet an ink from said ink nozzles through said ink passages; wherein
20 a thin film of ferroelectric substance of said piezoelectric element is formed by applying a fine patterning to a gel thin film of ferroelectric substance which is obtained by introducing a photosensitive group into a precursor sol of
25 ferroelectric substance formed by sol-gel method and by

applying said precursor sol to a base.

Add
B7